

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P450355

Luminaire Tested: **GALN-SA1A-827-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450355  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA1A-827-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3467 lumens  
Efficiency: N/A  
Efficacy: 105.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

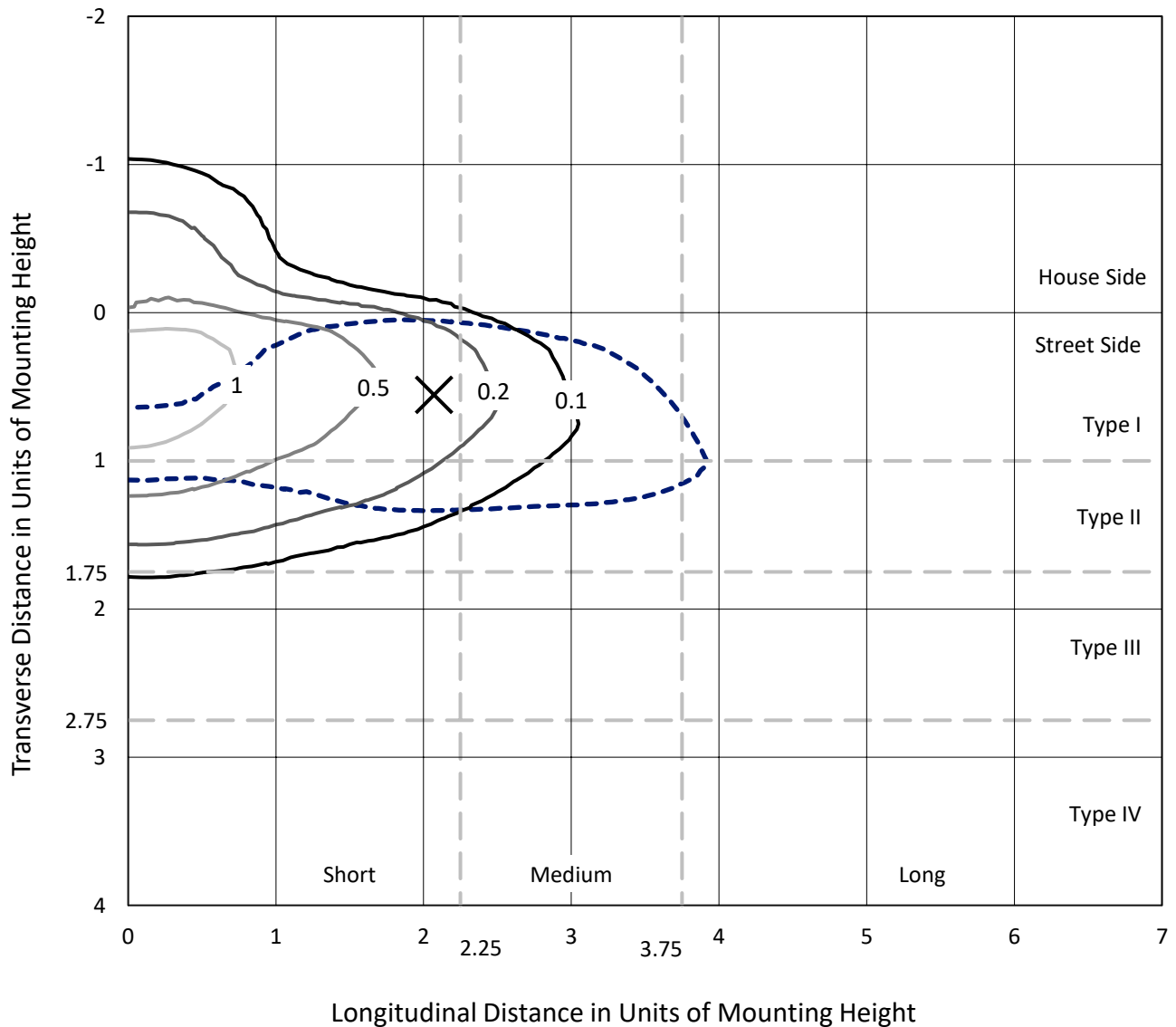
Input Watts (W): 33  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

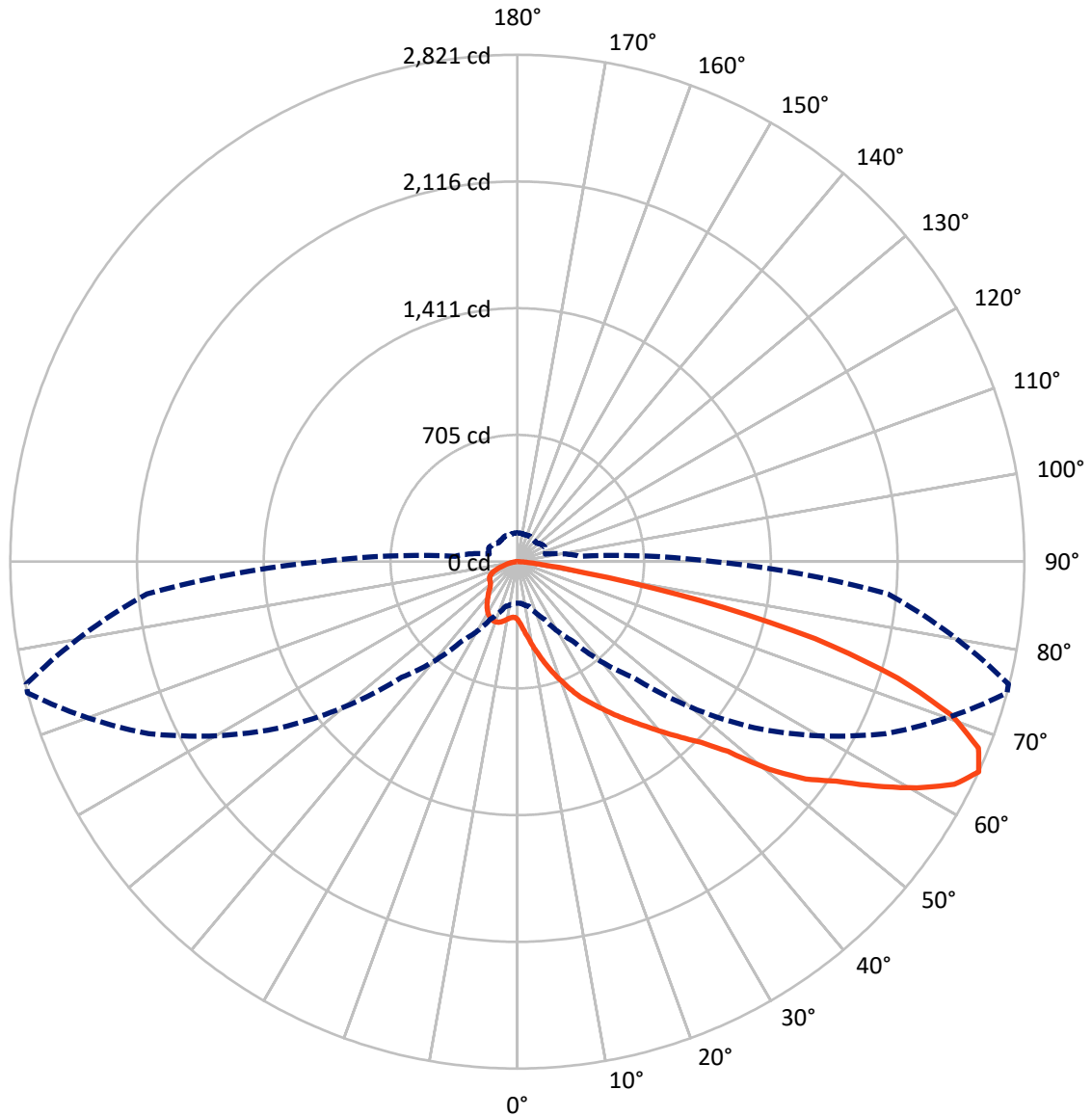
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	582.9	0.0	582.9
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	2884.2	0.0	2884.2
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	3467.0	0.0	3467.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.1	1.1
10°-20°	153.3	4.4
20°-30°	296.1	8.5
30°-40°	481.0	13.9
40°-50°	661.6	19.1
50°-60°	781.2	22.5
60°-70°	684.4	19.7
70°-80°	326.8	9.4
80°-90°	43.5	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3467.0	100.0
0°-180°	3467.0	100.0

**Coefficient of Utilization**



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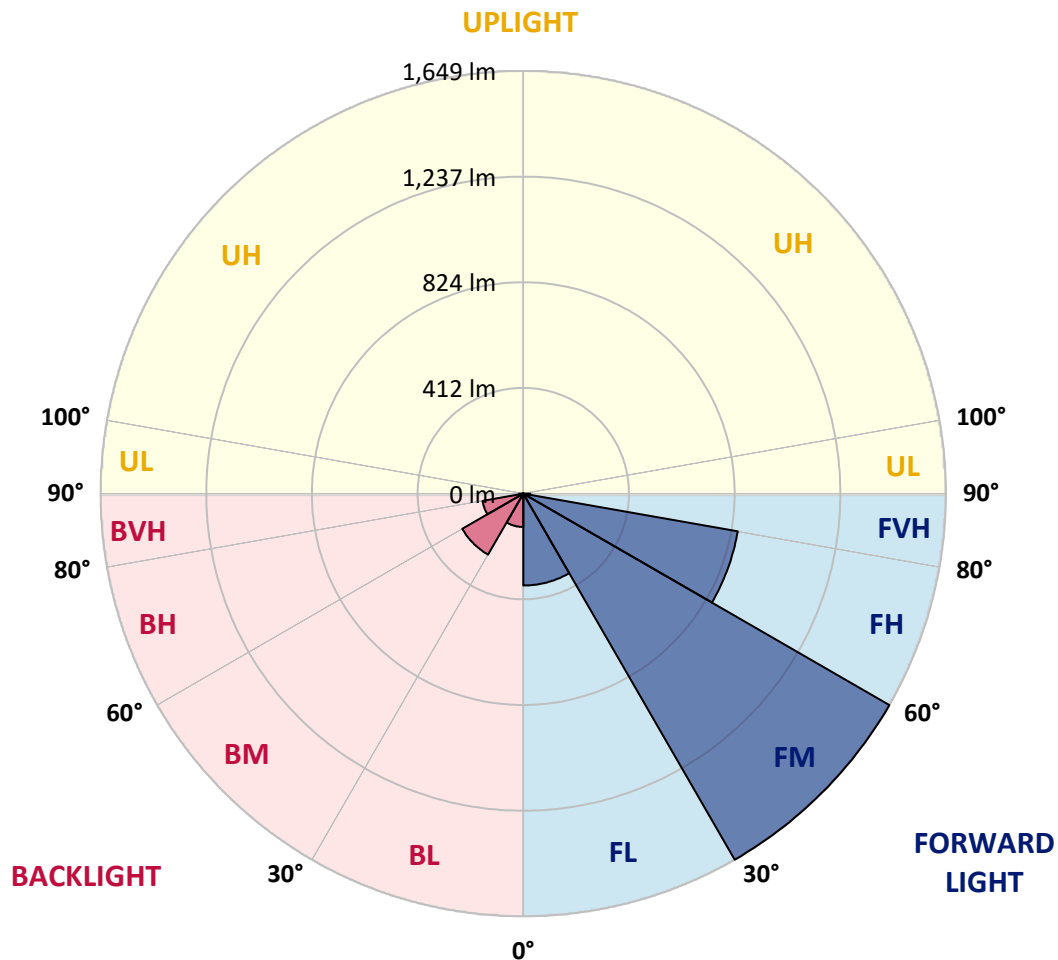
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	358.4	10.3			
FM (30°-60°)	1649.0	47.6			
FH (60°-80°)	849.6	24.5			G1/1800
FVH (80°-90°)	27.2	0.8			G1/100
BL (0°-30°)	130.1	3.8	B1/500		
BM (30°-60°)	274.8	7.9	B1/1000		
BH (60°-80°)	161.6	4.7	B1/500		G1/500
BVH (80°-90°)	16.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	322.1	322.1	322.1	322.1	322.1	322.1	322.1	322.1	322.1	322.1	322.1
2.5°	428.0	425.2	422.2	413.9	405.1	395.1	380.8	367.1	348.8	348.3	334.7
5°	546.7	544.8	531.4	523.7	503.2	476.0	452.8	416.9	383.6	379.7	353.3
7.5°	655.7	648.4	643.3	629.4	609.1	574.1	529.4	480.8	425.2	419.9	376.3
10°	737.9	737.2	734.5	722.5	707.3	672.5	622.8	553.2	477.8	467.5	404.1
12.5°	799.4	800.0	799.6	799.4	788.5	759.0	705.2	631.8	531.1	523.7	436.3
15°	839.8	845.5	847.7	857.1	858.1	838.3	792.1	707.8	591.0	580.1	470.9
17.5°	866.5	869.4	879.9	895.9	908.8	905.3	864.1	778.1	652.3	634.1	506.8
20°	892.1	897.0	905.1	926.9	949.8	960.4	931.4	850.2	713.1	701.4	546.5
22.5°	945.3	952.3	955.1	966.2	985.8	1004.4	991.2	919.2	779.7	763.9	588.6
25°	1035.4	1042.7	1034.8	1032.2	1038.6	1047.8	1045.0	984.2	842.5	819.9	628.5
27.5°	1152.7	1153.7	1138.3	1123.6	1107.8	1103.1	1094.4	1042.0	897.0	878.2	668.5
30°	1278.7	1274.2	1248.6	1222.1	1195.4	1169.1	1144.3	1097.6	957.7	936.1	707.8
32.5°	1395.7	1393.3	1364.9	1323.7	1278.5	1253.7	1203.5	1153.9	1022.8	1001.9	748.2
35°	1483.3	1486.9	1455.7	1410.7	1361.5	1339.5	1276.1	1212.9	1090.1	1067.4	792.3
37.5°	1545.6	1543.7	1516.1	1477.1	1433.9	1414.7	1360.9	1277.4	1162.5	1140.7	840.4
40°	1567.8	1566.6	1546.1	1517.7	1490.3	1483.5	1449.7	1347.0	1245.4	1219.9	898.3
42.5°	1553.7	1556.1	1542.6	1534.9	1529.8	1534.7	1537.9	1438.2	1335.9	1312.4	961.1
45°	1510.4	1509.1	1507.2	1519.8	1548.4	1580.6	1625.1	1524.3	1434.3	1415.4	1045.4
47.5°	1433.1	1442.5	1447.2	1482.0	1544.4	1620.6	1725.5	1639.8	1577.0	1560.6	1173.8
50°	1325.0	1332.5	1360.3	1422.2	1515.3	1635.7	1823.7	1828.6	1815.0	1784.4	1313.3
52.5°	1156.1	1167.8	1225.1	1338.5	1455.5	1629.4	1883.1	1990.5	2008.4	1985.4	1450.8
55°	967.1	983.5	1044.0	1192.8	1373.1	1595.6	1924.1	2084.3	2155.6	2134.4	1583.2
57.5°	782.1	799.4	861.6	1005.7	1229.5	1520.8	1951.0	2188.9	2356.1	2328.4	1747.9
60°	586.1	604.2	657.6	806.0	1024.9	1374.5	1932.8	2279.5	2556.3	2544.5	1912.8
62.5°	378.2	398.1	444.5	567.3	787.7	1174.6	1835.2	2329.6	2729.7	2715.4	2033.2
65°	230.4	232.6	258.2	352.2	539.1	909.4	1612.0	2263.2	2821.1	2816.8	2069.9
67.5°	148.9	152.5	164.2	211.0	323.3	631.7	1288.9	2044.1	2767.7	2766.2	1994.1
70°	125.8	126.9	132.2	142.4	187.9	383.1	905.1	1694.9	2564.8	2564.8	1811.9
72.5°	112.5	114.0	115.8	119.0	134.1	217.0	540.1	1319.4	2214.5	2229.1	1542.2
75°	102.1	101.7	102.9	103.4	114.3	141.8	279.3	975.8	1713.1	1683.8	1116.8
77.5°	87.4	88.0	87.4	89.9	101.0	107.9	141.8	654.8	1038.2	1000.2	560.6
80°	71.8	72.8	73.7	75.2	86.3	82.0	85.2	298.4	384.0	375.9	173.2
82.5°	54.0	55.3	56.8	60.4	67.9	54.2	53.8	127.5	138.6	126.9	63.7
85°	21.8	25.8	38.9	42.5	42.7	29.7	33.1	53.2	56.6	55.3	25.0
87.5°	5.1	6.0	12.6	19.0	17.5	11.1	12.2	17.3	19.7	18.2	8.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	322.1	322.1	322.1	322.1	322.1	322.1	322.1	322.1	322.1	322.1	322.1
2.5°	328.5	321.9	310.7	302.0	295.8	290.3	287.0	284.9	284.1	284.0	284.1
5°	339.6	328.0	310.1	298.8	292.6	289.0	287.0	286.8	287.0	287.2	286.6
7.5°	354.8	338.1	314.8	304.3	299.6	296.9	296.0	295.6	295.8	295.6	295.6
10°	375.2	352.2	324.0	313.1	309.2	306.1	304.6	303.7	302.9	302.2	301.8
12.5°	397.5	367.8	334.0	323.4	317.8	313.1	309.7	307.3	305.6	303.9	303.5
15°	422.5	384.4	345.1	330.4	322.3	315.4	309.5	305.6	302.6	300.1	299.9
17.5°	446.4	400.0	352.6	333.6	321.8	312.0	304.3	298.8	295.0	291.9	291.5
20°	472.0	414.8	356.0	331.5	316.1	304.3	294.1	287.5	283.2	279.6	279.1
22.5°	497.8	427.4	355.6	324.9	306.3	292.4	281.7	274.7	269.7	266.1	264.8
25°	522.4	437.6	350.9	314.4	292.8	278.3	267.4	261.0	256.5	252.2	252.2
27.5°	544.6	443.6	342.1	301.6	278.9	263.6	255.0	249.2	245.0	242.2	240.5
30°	566.4	446.4	330.0	285.5	264.2	251.2	244.3	240.9	237.1	233.9	233.6
32.5°	586.0	445.9	315.0	269.7	250.3	241.1	238.3	235.6	231.7	227.2	226.0
35°	605.0	442.1	297.1	252.4	238.6	235.1	235.8	232.1	224.9	219.3	218.3
37.5°	625.6	435.3	277.6	238.3	228.9	232.2	234.1	225.8	214.2	205.3	203.3
40°	649.5	427.6	257.3	224.2	221.1	229.6	229.6	214.4	198.4	192.9	191.4
42.5°	677.5	421.2	240.3	212.3	214.8	223.2	222.3	199.1	192.6	189.7	189.0
45°	721.9	419.0	222.8	202.0	209.5	215.7	208.0	193.9	190.1	187.9	187.1
47.5°	792.1	421.6	207.4	194.3	203.5	208.2	192.0	190.3	187.7	184.5	184.1
50°	857.1	419.2	196.5	189.9	198.2	199.1	185.4	186.0	184.5	180.9	180.2
52.5°	910.3	411.5	189.6	187.7	193.7	183.3	179.2	181.3	180.7	176.2	175.4
55°	968.8	406.8	186.2	187.7	190.7	169.6	173.4	176.4	175.6	172.4	172.3
57.5°	1039.7	407.7	183.7	188.2	187.7	162.7	167.6	171.1	170.9	170.0	170.0
60°	1112.3	408.1	180.0	188.0	184.1	157.2	161.5	166.6	167.0	167.6	167.6
62.5°	1136.4	391.7	172.6	184.7	176.2	151.9	155.9	162.9	162.5	164.0	164.2
65°	1091.4	346.4	161.7	177.0	166.0	148.2	151.6	158.0	155.9	159.8	160.6
67.5°	993.5	286.6	144.8	163.0	154.8	144.2	148.7	151.2	147.4	155.1	155.3
70°	858.6	223.8	123.4	143.3	142.0	140.1	146.5	142.7	137.5	146.9	145.0
72.5°	718.0	170.9	98.5	117.2	124.9	133.9	142.5	131.8	124.5	127.3	123.9
75°	539.3	126.4	79.2	91.8	104.0	125.1	139.0	118.7	107.4	104.7	104.0
77.5°	274.9	82.6	59.2	68.6	78.0	113.0	134.1	103.2	88.9	84.8	82.9
80°	98.2	51.3	41.7	47.4	52.7	97.2	117.2	85.4	69.0	68.3	69.0
82.5°	45.5	33.1	28.0	31.0	31.2	64.9	89.3	63.7	52.5	79.7	67.3
85°	19.6	16.5	15.8	15.4	14.3	29.0	50.2	34.2	53.4	23.9	22.0
87.5°	5.8	6.6	5.8	4.3	3.2	3.2	5.1	1.9	1.3	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)